

U. S. Department of Agriculture, WEATHER BUREAU.

CHARLES F. MARVIN, Chief.

ILLINOIS SECTION OF THE CLIMATOLOGICAL SERVICE.

CONDENSED METEOROLOGICAL SUMMARY For September, 1913.

Prepared by CLARENCE J. ROOT, Section Director, SPRINGFIELD, ILL.

The mean temperature was within 0.1° of the normal but the readings during most of the first decade were unusually high. The monthly maximum was above 100° over most of the state and September records were exceeded at about one-third of the stations. The highest temperature, 109°, occurred at Equality, Gallatin County, on the 3d. The coolest periods prevailed about the 22d and 27th. The lowest reading was 29° at several stations in the extreme north. Frosts, killing in some sections, were general.

The long and severe drought of the summer of 1913 in the central and southern districts was broken in nearly all counties on or before the 12th. Rains were quite general from the 15th to the 18th and on several succeeding days. The average departure for the state was -0.49 inch. The region of least monthly rainfall extends through the Illinois Valley; the heaviest totals appear in the southern counties. A heavy 24 hour fall of 3.50 inches occurred at Hillsboro, Montgomery County, on the 8th-9th. Traces of snow fell at Astoria and Lincoln on the 20th.

Thunderstorms were infrequent and there were no destructive storms. The following averages are for the state: Rainy days, 8; clear days, 15; partly cloudy days, 7; cloudy days, 8; prevailing wind direction, southeast.

TOTAL PRECIPITATION WITH DEPARTURE FROM NORMAL.

STATIONS	Precipitation	Departure	STATIONS	Precipitation	Departure	STATIONS	Precipitation	Departure
Albion	3.73	+0.60	Grafton	5.04	+1.46	Oregon	2.76	.....
Aledo	2.19	-1.82	Greenville	3.52	-0.10	Ottawa	2.10	-1.42
Alexander	3.04	-0.74	Griggsville	3.10	-1.13	Palestine	3.23	-0.16
Antioch	3.10	-1.00	Hannibal, Mo..	3.91	+0.35	Pana .....	.....	.....
Astoria	2.12	-2.14	Havana	1.59	-2.61	Paris	3.62	+0.26
Aurora	1.68	-1.91	Henry	2.21	-1.13	Paw Paw	2.65	.....
Bloomington ..	2.27	-1.42	Highland Park.	1.35	-1.85	Peoria	2.58	-0.54
Cairo	2.22	-0.25	Hillsboro	7.22	+3.43	Philo	4.46	+1.30
Camp Point....	1.64	.....	Hoopeston	2.44	-1.07	Pontiac	1.81	-2.22
Carbondale	2.74	-0.03	Joliet	1.37	-2.41	Quincy	1.85	.....
Carlinville	3.80	+0.25	Keokuk, Ia....	1.42	-2.55	Riley	3.09	-0.62
Carlyle	4.57	+0.97	Kishwaukee ...	3.58	+0.43	Rileyville	3.30	-0.16
Casey	3.80	+0.96	La Grange.....	.....	.....	Roberts	1.79	.....
Chester	5.41	+1.50	La Harpe.....	1.96	-2.20	Rockford.....	3.67	+0.63
Chicago	1.49	-1.53	Lanark	2.86	-0.56	Rushville	2.22	-2.08
Clinton	3.62	.....	La Salle.....	1.92	-1.28	St. Charles....	2.72	-1.83
Cobden	4.81	+1.33	Lincoln	2.58	-1.17	St. Louis.....	4.50	+1.59
Dakota	2.80	.....	McLeansboro ..	4.03	+0.85	St. Peter.....	2.88	-0.56
Danville	3.68	+0.33	Macomb	1.89	.....	Shawneetown ..	3.07	.....
Davenport, Ia..	1.80	-1.34	Manteno	1.35	.....	Sidell	2.78	.....
Decatur	3.74	+0.12	Martinton.....	2.22	-1.30	Sparta	4.21	+0.75
Dixon	2.57	-0.92	Mascoutah	2.97	-0.73	Springfield ...	3.41	+0.04
Dubuque, Ia....	3.59	0.00	Metropolis	1.74	.....	Streator	1.21	-2.25
DuQuoin	4.99	+2.03	Minonk	1.32	-2.51	Sullivan	3.82	+0.18
Dwight	0.88	-2.03	Monmouth.....	1.89	-2.81	Sycamore	3.23	-0.22
East St. Louis..	4.96	.....	Montrose	2.30	.....	Tiskilwa	1.60	-2.73
Edwardsville ..	4.56	+1.95	Morris	0.81	.....	Tuscola	3.43	-0.02
Elgin	2.13	.....	Morrison	2.59	-0.95	Urbana	2.50	-0.53
Equality	3.68	+0.39	Morrisonville ..	3.66	+0.34	Walnut	2.02	-2.01
Ewing	3.88	.....	Mount Carmel..	2.88	-0.50	Warsaw	1.58	-1.62
Fairfield	4.65	+1.24	Mount Vernon..	4.20	+0.47	Waterloo	5.12	.....
Fairview	1.43	.....	Nashville	2.87	-0.26	White Hall....	3.87	+0.43
Flora	3.77	+0.60	New Burnside..	4.01	+0.95	Windsor	3.20	-0.68
Galva	1.85	-1.72	Newton	2.56	Winnebago	2.76	-0.82
Golconda	3.96	+0.80	Olney	4.04	+0.65	Yorkville	1.18	-2.55

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Prepared by CLARENCE J. ROOT, Section Director, SPRINGFIELD, ILL.

The mean temperature was 1.1° below the normal. The two halves of the month differed greatly in thermal conditions, the first half being almost continuously excessive but in the last half the readings were generally deficient. The highest temperature was 91° at Equality, Gallatin County, on the 7th; the lowest, 17° at Dakota, Stephenson County, and Lanark, Carroll County, on the 31st. Killing frosts were general throughout the state on the 31st.

The precipitation ranged from less than two inches in the west-central part of the state to more than eight inches in Randolph County, where all previous October records were exceeded. The state average was 3.80 inches; departure +1.53 inches. The amounts were well distributed through the month. The snowfall was unusual for the time of year. At 72 percent of the stations where measurable amounts were recorded the previous October records were broken, and at a majority of them the total this year exceeded the combined amounts of all previous Octobers.

The cloudiness was excessive, the sunshine deficient, and the number of rainy days, about twice the usual number in October. The following averages are for the state: Rainy days, 10; clear days, 13; partly cloudy days, 7; cloudy days, 11; prevailing wind direction, northwest.

TOTAL PRECIPITATION WITH DEPARTURE FROM NORMAL.

STATIONS	Precipitation	Departure	STATIONS	Precipitation	Departure	STATIONS	Precipitation	Departure
Albion	3.74	+1.39	Galva	2.05	+0.08	Oregon	3.99	.....
Aledo	2.81	+0.57	Galeonda	2.67	-0.29	Ottawa	2.70	+0.62
Alexander	3.07	+1.08	Greenville	4.55	+1.69	Palestine	3.08	+0.50
Antioch	5.51	+3.09	Griggsville	3.87	+1.01	Pana	4.19	+1.71
Astoria	2.30	+0.26	Hannibal, Mo..	2.77	+1.13	Paris	4.33	+2.11
Aurora	3.85	+1.24	Havana	2.27	+0.29	Paw Paw	2.93	.....
Bement	2.60	.....	Henry	2.65	+0.55	Peoria	3.11	+0.54
Bloomington ..	4.24	+2.41	Highland Park.	3.16	+0.98	Philo	3.34	+1.11
Cairo	5.50	+2.87	Hillsboro	3.83	+0.44	Pontiac	5.05	+2.99
Camp Point....	2.71	.....	Hoopeston	3.71	+1.74	Quincy	1.94	.....
Carbondale	5.73	.....	Joliet	2.93	+0.81	Riley	3.22	+0.93
Carlinville	2.86	+0.45	Keokuk, Ia....	1.43	-1.06	Rileyville	4.02	+2.02
Carlyle	4.36	+2.09	Kishwaukee	2.88	+0.25	Roberts	3.06	.....
Casey	5.13	+1.57	La Grange.....	2.54	+0.91	Rockford.....	3.13	+0.36
Charleston....	4.63	+1.92	La Harpe.....	2.07	-0.39	Rushville	2.87	+1.09
Chester	7.98	+5.33	Lanark	3.61	+1.46	St. Charles....	3.14	+0.99
Chicago	2.23	-0.32	Lincoln	4.21	+2.17	St. Louis.....	4.07	+1.66
Clinton	4.60	.....	McLeansboro ..	4.52	+2.18	St. Peter.....	5.31	+2.12
Cobden	6.97	+3.49	Macomb	2.20	.....	Shawneetown ..	2.87	.....
Dakota	3.41	.....	Manteno	2.51	.....	Sidell	4.53	.....
Danville	4.80	+2.25	Martinton.....	4.00	+1.73	Sparta	8.52	+5.80
Davenport, Ia..	3.01	+0.62	Mascoutah	5.15	+2.43	Springfield ...	3.61	+1.01
Decatur	3.65	+1.47	Metropolis	4.10	.....	Streator	2.29	+0.68
Dixon	3.22	+1.12	Minonk	2.39	-0.74	Sullivan	4.14	+1.63
Dubuque, Ia...	2.92	+0.24	Monmouth....	3.21	+1.09	Sycamore	3.95	+1.26
DuQuoin	4.81	+2.53	Montrose	4.37	.....	Tiskilwa	2.72	+0.60
Dwight	2.98	+1.04	Morris	2.05	.....	Tuscola	4.08	+1.79
East St. Louis..	5.03	.....	Morrison	2.76	+0.68	Urbana	4.03	+2.08
Edwardsville ..	5.17	+2.55	Morrisonville ..	4.00	+1.59	Walnut	2.88	+1.02
Elgin	2.24	.....	Mount Carmel..	3.45	+0.85	Warsaw	1.67	-1.16
Equality	3.98	+0.49	Mount Vernon..	4.66	+2.22	Waterloo	5.19	+2.15
Ewing	4.76	.....	Nashville	6.25	+3.56	White Hall....	3.64	.....
Fairfield	4.08	+1.73	New Burnside..	6.43	+3.15	Windsor	4.26	+2.01
Fairview	3.03	Newton	4.45	Winnebago	3.32	+1.04
Flora	4.60	+2.10	Olney	3.72	+1.36	Yorkville	3.81	+1.34

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CONDENSED METEOROLOGICAL SUMMARY For November, 1913.

Prepared by CLARENCE J. ROOT, Section Director, SPRINGFIELD, ILL.

The month was unusually warm, with mean temperature 6.9° above the normal. After the 12th the weather was mild and springlike with temperatures almost continuously above freezing, an unprecedented condition for the time of year. November maximum temperature records were closely approached at a number of stations. The highest temperature was 80° at three southern Illinois stations on the 19th and 22nd; the lowest, 11° at Dakota, Stephenson County, and Lanark, Carroll County, on the 11th.

The precipitation decreased steadily from a maximum of more than six inches in Clark and Effingham counties to less than two inches over northern Illinois, where the amounts were deficient at all stations. The state average was 3.15 inches; departure +0.29 inch. The principal rainy periods were 14th to 16th and 26th to 30th. The snowfall was very light, but six stations reporting measurable quantities.

The cloudiness was excessive, the sunshine deficient, and the rainy days were somewhat more than the usual November number. The following averages are for the state: Rainy days, 9; clear days, 11; partly cloudy days, 6; cloudy days, 13; prevailing wind direction, southwest.

TOTAL PRECIPITATION WITH DEPARTURE FROM NORMAL.

STATIONS	Precipitation	Departure	STATIONS	Precipitation	Departure	STATIONS	Precipitation	Departure
Albion	5.00	-1.55	Galva	1.74	-0.09	Oregon	2.37	.....
Aledo	1.24	-0.67	Golconda	4.77	+0.63	Ottawa	1.80	-0.55
Alexander	3.60	+1.47	Grafton	3.52	+1.07	Palestine	5.35	+1.61
Antioch	1.62	-0.49	Greenville	5.48	+2.10	Pana	4.40	+0.82
Astoria	2.75	-0.78	Hannibal, Mo..	3.24	+1.29	Paris	4.03	+0.84
Aurora	1.74	-0.68	Havana	2.99	+0.86	Paw Paw	1.78	.....
Bement	3.97	.....	Henry	2.09	-0.27	Peoria	2.77	+0.13
Bloomington ..	2.69	+0.10	Highland Park.	2.21	-0.08	Philo	4.08	+1.00
Cairo	3.14	-0.88	Hillsboro	4.59	+1.91	Pontiac	1.58	-0.43
Camp Point....	2.28	.....	Hoopeston	3.31	+0.62	Quincy	1.94	.....
Carbondale	3.44	+0.79	Joliet	1.18	-1.04	Riley	1.73	-0.26
Carlinville	4.02	+1.39	Keokuk, Ia....	2.22	+0.37	Rileyville	3.76	+1.14
Carlyle	5.52	+2.20	Kishwaukee ...	1.96	-0.27	Roberts	2.29	.....
Casey	6.32	+2.65	La Grange.....	1.71	-0.58	Rockford	1.52	-0.89
Charleston....	3.89	+0.67	La Harpe.....	2.43	+0.46	Rushville	3.35	+1.21
Chester	3.39	+0.30	Lanark	1.32	-0.67	St. Charles....	1.63	-0.76
Chicago	1.47	-1.03	La Salle.....	1.32	-1.32	St. Louis.....	3.12	+0.24
Clinton	3.15	.....	Lincoln	3.44	+1.11	St. Peter.....	5.07	+2.66
Cobden	3.47	-0.67	Macomb	2.71	.....	Shawneetown ..	4.42	.....
Dakota	1.66	.....	Manteno	2.47	.....	Sidell	3.84	.....
Danville	4.86	+1.61	Martinton....	2.40	-0.53	Sparta	2.86	-0.49
Davenport, Ia..	1.26	-0.50	Mascoutah	3.90	+0.68	Springfield ...	4.49	+1.83
Decatur	3.68	+1.12	Metropolis	3.64	.....	Streator	2.30	-0.01
Dixon	0.76	-0.94	Minonk	2.12	+0.16	Sullivan	4.86	+2.16
Dubuque, Ia....	1.23	-0.58	Monmouth....	2.06	+0.20	Sycamore	1.23	-1.11
DuQuoin	3.24	+0.41	Montrose	6.38	.....	Tiskilwa	2.40	-0.15
Dwight	2.06	-0.44	Morris	2.09	.....	Tuscola	4.29	+1.71
East St. Louis..	3.50	.....	Morrison	1.54	-0.34	Urbana	4.49	+2.14
Edwardsville ..	4.21	+1.01	Morrisonville ..	4.21	+1.98	Walnut	1.76	-0.17
Elgin	1.46	.....	Mount Carmel..	4.60	+0.91	Warsaw	1.78	-0.62
Equality	3.93	+0.80	Mount Vernon..	3.84	+0.89	Waterloo	2.55	.....
Ewing	3.35	.....	Nashville	3.98	+1.09	White Hall....	4.74	+1.85
Fairfield	4.40	+1.20	New Burnside..	4.19	+0.90	Windsor	4.28	+1.30
Fairview	2.45	Newton	5.93	Winnebago	1.90	-0.24
Flora	4.67	+1.33	Olney	4.89	+1.42	Yorkville	1.58	-0.79

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Like November, the month was unusually warm, with the temperature almost continuously above normal. The mean departure is 6.2°. The maximum readings were not exceptionally high and no zero weather prevailed. The highest temperature was 74° at Cobden, Union County, on the 1st; the lowest, 9° at Dakota, Stephenson County, on the 21st, and Lanark, Carroll County, on the 26th.

The precipitation was deficient at practically all stations. Over much of the north and central portions of the state the totals are less than an inch and a few stations report the least of any December. The state average is 1.06 inches; departure, -1.08 inches. Precipitation was most general on the 1st and 6th and scattering through the period 20th to 26th. The least snowfall, a trace, occurred in Vermilion and some of the extreme northern counties and the greatest, ten inches, in Monroe and Randolph counties, but the state average was nearly normal.

The wind movement was unusually light, the cloudiness excessive, the sunshine deficient over the lower half of the state, and there were no severe storms of any character. The following averages are for the state: Rainy days, 6; clear days, 11; partly cloudy days, 4; cloudy days, 16; prevailing wind direction, southwest.

TOTAL PRECIPITATION WITH DEPARTURE FROM NORMAL.

STATIONS	Precipitation	Departure	STATIONS	Precipitation	Departure	STATIONS	Precipitation	Departure
Albion	1.18	-1.86	Galva	0.69	-0.81	Olney	1.41	-1.23
Aledo	0.83	-0.44	Golconda	1.83	-1.69	Ottawa	0.59	-1.35
Alexander	0.67	-1.13	Grafton	1.58	-0.76	Palestine	1.15	-1.63
Antioch	T	-1.43	Greenville	1.26	-1.37	Pana	0.42	-2.10
Astoria	1.27	-0.51	Griggsville	0.79	-0.80	Paris	1.49	-0.75
Aurora	0.46	-1.48	Hannibal, Mo..	1.11	-0.54	Paw Paw	0.34	.....
Bement	1.07	.....	Havana	0.70	-1.24	Peoria	0.74	-1.63
Bloomington ..	0.80	-1.31	Henry	1.29	-0.52	Philo	0.45	-1.65
Cairo	0.84	-2.49	Highland Park.	0.31	-1.36	Pontiac	1.24	-0.78
Camp Point....	1.39	.....	Hillsboro	0.72	-1.55	Quincy	1.60	.....
Carbondale	2.05	-0.13	Hoopeston	1.24	-0.95	Riley	0.55	-1.22
Carlinville	0.85	-1.32	Joliet	0.36	-1.62	Rileyville	1.31	-1.88
Carlyle	1.86	-0.40	Keokuk, Ia....	1.35	-0.52	Roberts	0.84	.....
Casey	0.34	-1.65	Kishwaukee	0.28	-1.56	Rockford	0.55	-1.32
Charleston.....	0.64	-1.65	La Grange.....	0.28	-1.40	Rushville	1.09	-0.62
Chester	2.45	-0.08	La Harpe.....	0.94	-1.29	St. Charles....	0.62	-1.28
Chicago	0.45	-1.62	Lanark	0.51	-1.06	St. Louis.....	1.62	-0.61
Clinton	1.36	.....	La Salle.....	1.42	-0.86	St. Peter.....	1.04	-1.09
Cobden	1.47	-1.97	Lincoln	0.83	-1.14	Shawneetown ..	1.85	.....
Dakota	0.14	.....	Macomb	1.72	+0.20	Sidell	1.16	.....
Danville	0.88	-1.11	Manteno	0.86	.....	Sparta	1.59	-0.77
Davenport, Ia..	0.54	-1.15	Martinton.....	1.22	-1.11	Springfield	0.77	-1.66
Decatur	1.62	-0.50	Mascontah	1.60	-0.78	Streator	1.84	+0.13
Dixon	1.17	-0.01	Metropolis	2.97	.....	Sullivan	0.58	-1.37
Dubuque, Ia....	0.34	-1.38	Minonk	1.44	-0.32	Sycamore	0.48	-1.45
DuQuoin	1.42	-1.10	Monmouth.....	1.04	-0.48	Tiskilwa	0.59	-1.26
Dwight	1.20	-0.38	Montrose	0.63	.....	Tuscola	0.41	-1.91
East St. Louis..	1.36	.....	Morris	0.91	.....	Urbana	0.77	-1.06
Edwardsville ..	1.87	-0.11	Morrison	0.19	-1.19	Walnut	0.39	-1.14
Elgin	1.07	.....	Morrisonville ..	0.62	-1.23	Warsaw	1.55	-0.02
Equality	1.54	-1.65	Mount Carmel..	2.54	-0.70	Waterloo	1.42	.....
Ewing	1.27	.....	Mount Vernon..	1.83	-0.72	White Hall....	1.16	-0.16
Fairfield	1.84	-0.88	Nashville	1.76	-0.52	Windsor	0.60	-1.56
Fairview	0.82	.....	New Burnside..	1.61	-1.41	Winnebago	0.30	-1.51
Flora	1.44	-1.22	Newton	1.01	.....	Yorkville	0.30	-1.40